ABSTRACT

There is provided means for analyzing organism-related molecules, dealing with multi item analysis, that are captured according to probe species, and for collecting according to the probe species. A magnetic micro-particle array is fixed with magnets that are configured with magnetic micro-particles in a capillary and with an array of glass beads to which DNA probes of different types from each other are immobilized. A syringe pump and a cross valve are operated to circulate a sample solution in the magnetic micro-particle array, which is reacted with probe DNAs on a glass bead with a probe. Subsequently, a washing solution is introduced to wash inside of the capillary. Next, respective beads are measured for fluorescence intensities. Furthermore a particular bead is collected based on results of fluorescence measurement. Target molecules captured on a surface of the collected bead may be separated by heat-denaturation, which then may be subjected to next analysis.